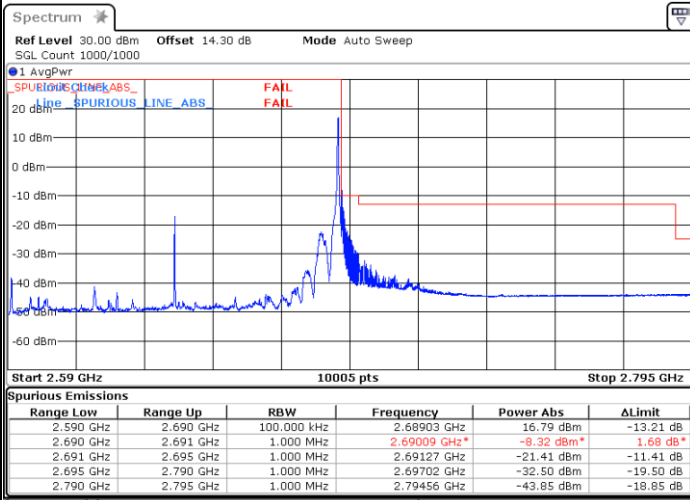




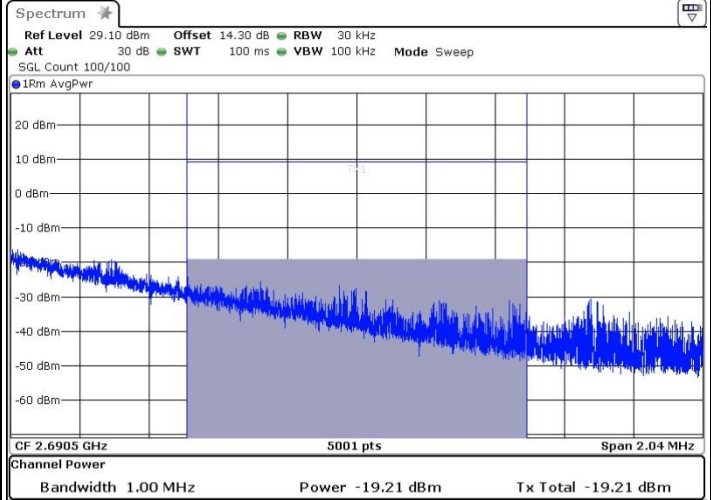
FR1 UL-MIMO n41 / 100MHz / CP-OFDM QPSK (MIMO 2)

Highest Band Edge / 1 RB

Channel Power < -10dBm Pass

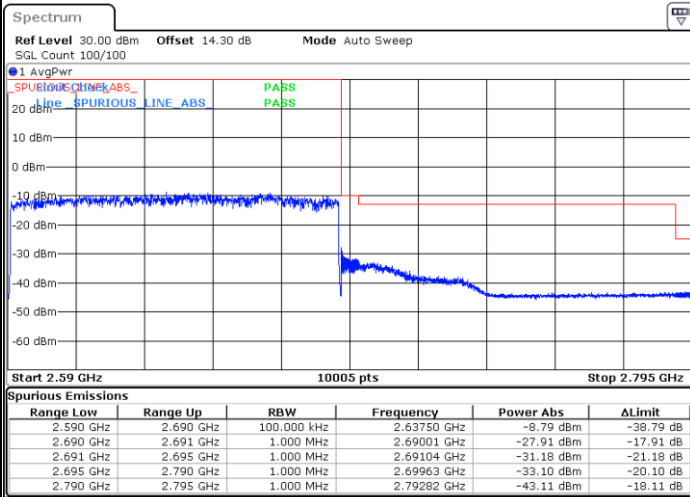


Date: 25.AUG.2021 21:23:32



Date: 25.AUG.2021 21:25:35

Highest Band Edge / Full RB



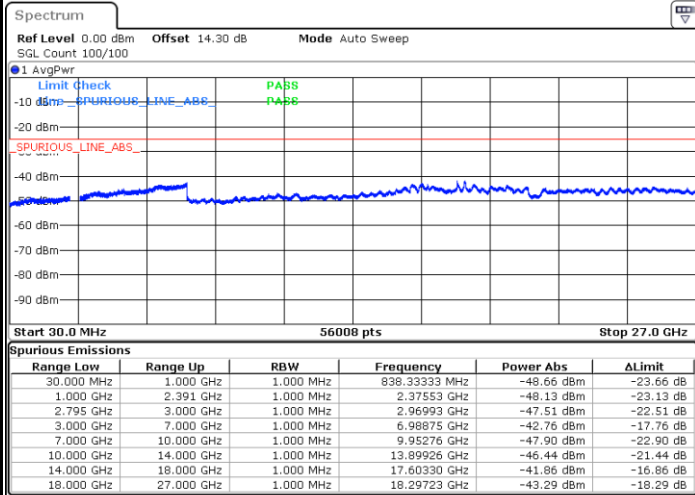
Date: 25.AUG.2021 21:11:03



Conducted Spurious Emission

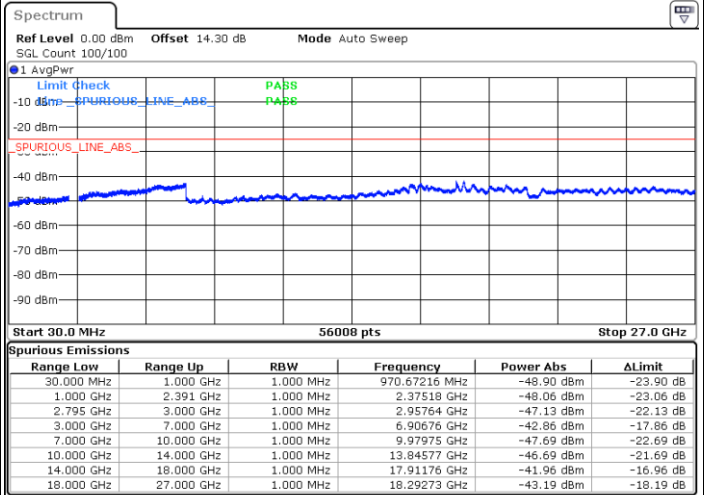
FR1 UL-MIMO n41 / 100MHz / CP-OFDM QPSK (MIMO 1)

Lowest Channel / 1RB



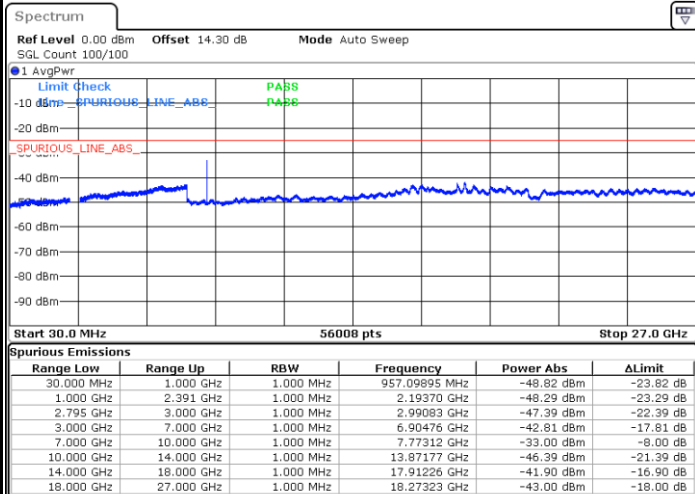
Date: 25.AUG.2021 22:41:05

Middle Channel / 1RB



Date: 25.AUG.2021 22:33:44

Highest Channel / 1RB



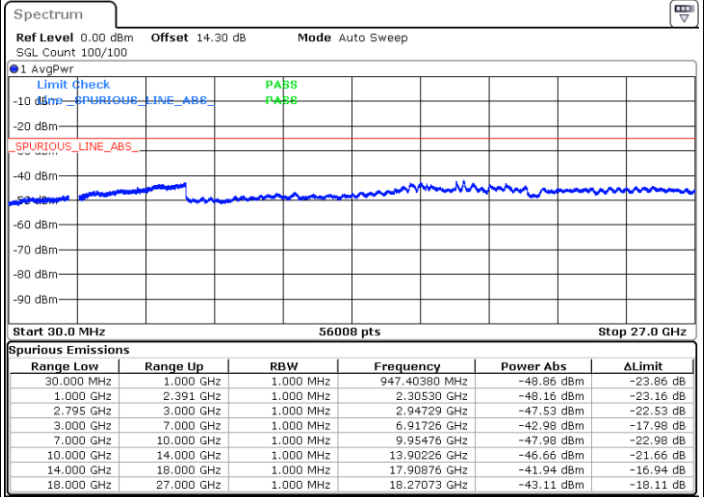
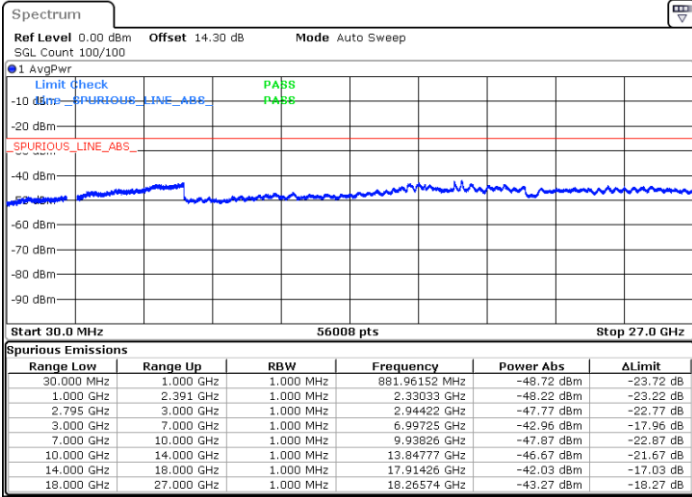
Date: 25.AUG.2021 23:03:05



FR1 UL-MIMO n41 / 100MHz / CP-OFDM QPSK (MIMO 2)

Lowest Channel / 1RB

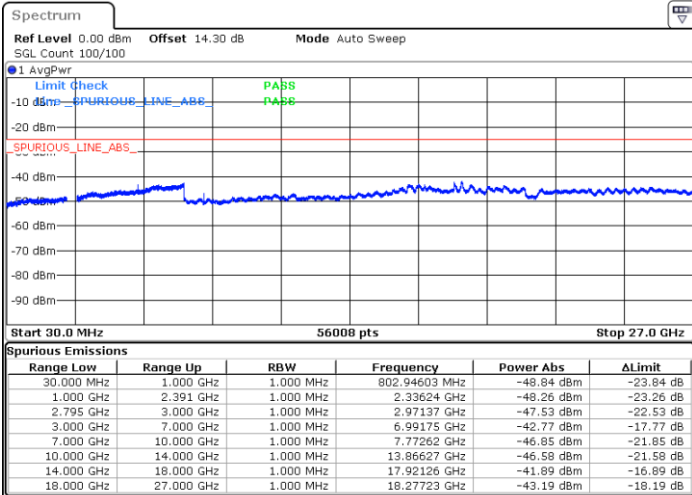
Middle Channel / 1RB



Date: 25.AUG.2021 21:50:53

Date: 25.AUG.2021 21:35:03

Highest Channel / 1RB



Date: 25.AUG.2021 21:27:08



Frequency Stability

Test Conditions		NR UL-MIMO n41 (QPSK) / Middle Channel	Limit
Temperature (°C)	Voltage (Volt)	BW 100MHz	Within Band
		Deviation (ppm)	Result
50	Normal Voltage	0.0013	PASS
40	Normal Voltage	0.0019	
30	Normal Voltage	0.0013	
20(Ref.)	Normal Voltage	0.0000	
10	Normal Voltage	0.0008	
0	Normal Voltage	0.0007	
-10	Normal Voltage	0.0019	
-20	Normal Voltage	0.0002	
-30	Normal Voltage	0.0017	
20	Maximum Voltage	0.0004	
20	Normal Voltage	0.0000	
20	Battery End Point	0.0011	

Note:

1. Normal Voltage =3.3 V. ; Battery End Point (BEP) =3.14 V. ; Maximum Voltage =4.4 V.
2. Note: The frequency fundamental emissions stay within the authorized frequency block.



Appendix B. Test Results of Radiated Test

Radiated Spurious Emission

EN-DC_66A_n41A HPUE/ LTE 20MHz + NR 100MHz / QPSK DFT-s-OFDM									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
NR n41 Middle	5185.80	-60.93	-25	-35.93	-80.37	-66.49	7.14	12.70	H
	7778.79	-54.37	-25	-29.37	-79.28	-57.67	8.30	11.60	H
	10371.42	-49.73	-25	-24.73	-79.66	-51.25	10.48	12.00	H
	5185.80	-60.29	-25	-35.29	-80.02	-65.85	7.14	12.70	V
	7778.79	-54.62	-25	-29.62	-79.36	-57.92	8.30	11.60	V
	10371.42	-50.73	-25	-25.73	-79.83	-52.25	10.48	12.00	V
LTE Band66 Middle	3471.5	-62.31	-13	-49.31	-77.72	-69.16	5.65	12.50	H
	5265	-61.15	-13	-43.25	-80.36	-61.92	7.13	12.80	H
	7020	-54.94	-13	-44.30	-79.24	-60.70	8.40	11.80	H
	3510	-62.14	-13	-48.84	-77.90	-68.69	5.65	12.50	V
	5265	-60.98	-13	-43.37	-80.30	-62.04	7.13	12.80	V
	7020	-54.55	-13	-43.63	-79.30	-60.03	8.40	11.80	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

5G NR n41 HPUE / NR 100MHz / QPSK DFT-s-OFDM									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5089.00	-55.26	-25	-30.26	-78.71	-5.56	7.14	12.70	H
	7633.50	-53.61	-25	-28.61	-79.53	-3.30	8.30	11.60	H
	10178.00	-50.13	-25	-25.13	-80.45	-1.52	10.48	12.00	H
	5089.00	-54.33	-25	-29.33	-78.76	-5.56	7.14	12.70	V
	7633.50	-52.57	-25	-27.57	-79.17	-3.30	8.30	11.60	V
	10178.00	-49.00	-25	-24.00	-80.54	-1.52	10.48	12.00	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.



5G NR n41_UL_MIMO HPUE / NR 100MHz / QPSK DFT-s-OFDM									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
Middle	5280.00	-61.73	-25	-36.73	-78.21	-67.29	7.14	12.70	H
	7920.00	-54.32	-25	-29.32	-77.64	-57.62	8.30	11.60	H
	10560.00	-52.28	-25	-27.28	-79.27	-53.80	10.48	12.00	H
	5280.00	-61.41	-25	-36.41	-77.93	-66.97	7.14	12.70	V
	7920.00	-54.75	-25	-29.75	-78.12	-58.05	8.30	11.60	V
	10560.00	-52.86	-25	-27.86	-79.78	-54.38	10.48	12.00	V

Remark: Spurious emissions within 30-1000MHz were found more than 20dB below limit line.

EN-DC_7C_n78A / LTE 10+20MHz + NR 20MHz / QPSK DFT-s-OFDM									
Channel	Frequency (MHz)	EIRP (dBm)	Limit (dBm)	Over Limit (dB)	SPA Reading (dBm)	S.G. Power (dBm)	TX Cable loss (dB)	TX Antenna Gain (dBi)	Polarization (H/V)
NR n78 Middle	7562.01	-54.68	-13	-41.68	-79.24	-60.24	7.14	12.70	H
	11343.01	-49.00	-13	-36.00	-80.63	-52.30	8.30	11.60	H
	15124.02	-48.90	-13	-35.90	-84.00	-50.42	10.48	12.00	H
	7562.01	-54.29	-13	-41.29	-78.82	-59.85	7.14	12.70	V
	11343.01	-49.36	-13	-36.36	-80.72	-52.66	8.30	11.60	V
	15124.02	-49.61	-13	-36.61	-84.1	-51.13	10.48	12.00	V
LTE Band7C Middle	5093.4	-59.45	-13	-46.45	-79.14	-66.20	5.85	12.60	H
	7640.1	-54.37	-13	-41.37	-78.98	-60.17	7.30	13.10	H
	10186.8	-50.04	-13	-37.04	-79.97	-53.19	8.35	11.50	H
	5093.4	-59.16	-13	-46.16	-79.03	-65.91	5.85	12.60	V
	7640.1	-54.65	-13	-41.65	-79.18	-60.45	7.30	13.10	V
	10186.8	-51.16	-13	-38.16	-79.84	-54.31	8.35	11.50	V

Remark:

1. Spurious emissions within 30-1000MHz were found more than 20dB below limit line.
2. We evaluated EN-DC_7C_n78A to test according to the maximum conducted power.